possible, the greatest of record for January. Over the Pacific coast sections the precipitation was practically everywhere less than normal, the deficiencies being large in California, where similar conditions have persisted for several months.

SNOWFALL.

In nearly all sections of the country the snowfall for January was less than normal, although considerable areas had a slight covering during much of the month. In the districts east of the Rocky Mountains the greatest depths were reported from northern New York, the interior of New England, and over the upper Lake region, but no particularly heavy falls occurred during the month. In general, not much interference to business interests resulted from drifting snow, save in Iowa and portions of adjoining States, where traffic was interrupted following the storm of the 8th and 9th and again about the 15th.

In the western Mountain districts the snowfall during January was likewise less than normal, though in portions of the middle Rocky Mountains there were more generous amounts.

In California and the adjacent portions of Oregon and Nevada the snowfall was unusually light, and in some sections probably the lightest of record for January.

The stored amounts in the higher mountains at the end of the month, where great importance attaches to the probable supply of water for irrigation and power purposes, are nearly everywhere less than normal.

Over the northern districts from the Great Lakes westward ice of sufficient thickness to harvest formed early in the month, and its storage progressed satisfactorily, through the month. In the more eastern districts, however, where ice is gathered for commercial purposes, it did not acquire a satisfactory thickness until late in the month.

RELATIVE HUMIDITY.

Despite the absence of appreciable precipitation over the Great Plains and mountain districts of the West, the relative humidity in these regions was mainly above normal. Over the Pacific coast States, however, particularly in California, the drought conditions were reflected in the lowered percentage of the relative humidity, which was in some cases nearly 20 per cent less than normal. On the other hand over the Atlantic and Gulf coast States, despite the fact that precipitation was generous to heavy, the relative humidity was also less than normal.

SEVERE LOCAL STORMS, JANUARY, 1924.

[The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the annual report of the Chief of Bureau.]

Place.	Date.	Time.	Width of path, yards.	Loss of life.	Value of property destroyed.	Character of storm.	Remarks.	Authority.
Brooklyn, N. Y.	1					Wind	A number of houses in course of construction were wrecked.	Daily News (New York).
Meridian, Miss. (4 miles southwest of).	3	1-2 a. m.				Tornado	Four homes wrecked and a store damaged; 1 person injured.	Official, U. S. Weather Bureau.
Rome, Ga.	10	P. m.				Wind	Considerable property damaged and 2 persons injured.	Star (Anniston, Ala.).
Central and northeastern Alabama.	10	do.		2		do.	Several dwellings damaged and a number of barns and sheds wrecked; some livestock killed; several persons injured.	Do. Pensacola News (Fla).
New York, N. Y., and vicinity.	16-17			6		High winds	General damage done; many persons injured.	Official, U. S. Weather Bureau.

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STORMS AND WEATHER WARNINGS.

By EDWARD H. BOWIE, Supervising Forecaster.

WASHINGTON FORECAST DISTRICT.

The month of January was notable for the frequency and pronounced character of its temperature changes, and this was particularly true of the Middle West and the Northwest, where a number of pronounced cold waves, that came southward out of Canada, reduced the temperatures for the month greatly below the normal. While these cold waves in several instances advanced eastward to the Atlantic coast and southward to the Gulf of Mexico, they were greatly modified in severity, and consequently no record-breaking low temperatures occurred except over limited areas. The eastward passage of high and low pressure areas occurred with great frequency, and as a result there were marked changes from high to low temperature and frequent changes from fair to falling weather. Moreover, the issue of storm warnings for the coastal waters was rather more than is ordinarily required for the month of January. The notable storm of the month occurred on the 16th, when southerly gales broke the airship *Shenandoah* from its mooring mast at Lakehurst, N. J.; and it was only because of a lull in the wind shortly thereafter was her crew able to bring her back to her hangar at Lakehurst. At noon of the day in question the Bureau of Aeronautics of the United States Navy Department was advised that the wind at Lakehurst would likely reach a velocity of 60 miles an hour or more during the late afternoon and early night.

The month opened with high barometric pressure general east of the Rocky Mountains, but with a low-pressure area of increasing intensity over the western Plateau region. This disturbance lost intensity in moving southeastward during the night of the 1st, but on the morning of the 2d there were unmistakable evidences of the formation of a center of low pressure over the northwestern portion of the Gulf of Mexico. This disturbance developed, as foreseen, and advanced northeastward and produced general precipitation over and east of the Mississippi Valley during the succeeding 36 hours. This was in turn followed by an area of high barometric pressure of great magnitude which on the morning of the 3d had its crest over the Northwestern States, and made necessary the issue of cold-wave warnings for practically all parts of the Washington Forecast District. These warnings were issued on the 3d, 4th, and 5th as the cold wave advanced eastward. On the 5th, as this high pressure was advancing eastward and the pressure falling rapidly off the Atlantic coast, storm